



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/640,986

08/14/2003

Timothy J. Brennan

NM 7606

9218

66882 7590 02/08/2007
NEWMARKET SERVICES CORPORATION
c/o JOHN H. THOMAS, P.C.
536 GRANITE AVENUE
RICHMOND, VA 23226

EXAMINER

TOOMER, CEPHIA D

ART UNIT

PAPER NUMBER

1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

02/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/640,986

Applicant(s)

BRENNAN ET AL.

Examiner

Cephia D. Toomer

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 14, 2006 has been entered.

This Office Action is in response to the amendment filed November 14, 2006 in which claim 1 was amended and claim 12 was canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2181607.

FR teaches a fuel composition comprising an Fe-based product or solution, such as iron naphthenate, as an additive. The Fe is preferably added to the fuel in the form of a solution containing 1-10 wt % (10-100 g/l) in combination with a solvent having a flash point of greater than 65 C (149 F)(see abstract in its entirety and page 3, last three

Art Unit: 1714

paragraphs). With respect to the cloud point and viscosity, it would be reasonable to expect that the composition of FR would meet these limitations because FR uses the additive of its invention in the same environment and for the same purpose as Applicant.

FR fails to teach that the solvent is aromatic. However, no unobviousness is seen in this difference because the teaching of hydrocarbon solvents suggests that the solvent may be aromatic.

FR fails to teach that the additive is adapted for diesel fuel. However, no unobviousness is seen in this difference because FR teaches that the additive of its invention is suitable for a liquid fuel and he teaches diesel engines. These teachings suggest diesel fuel.

4. Claims 8-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2181607 in view of WO 0188362, SOLVESSO 150 and www.oilchem.com.

FR has been discussed above. FR fails to teach the particulars regarding the solvent or that the solvent is aromatic. However, WO teaches that organic solvents such as aromatic hydrocarbons such as SOLVESSO products are used for incorporating metal compounds into bulk fuel (see page 29, lines 13-26). SOLVESSO 150 is an aromatic solvent that boils with the range of 183-207 C has a flash point of 66 C and a viscosity at 25 C of 1.21. See product data sheet.

It would have been obvious to one of ordinary skill in the art to select the claimed solvent because FR desires a hydrocarbon solvent, WO teaches that aromatic hydrocarbon solvents such as SOLVESSO are used to incorporate metal compounds

Art Unit: 1714

into bulk fuel and SOLVESSO 150 meets these requirements. Furthermore, oilchem.com teaches that the solvent used in the present invention, SHELLSOL AB, is an art recognized equivalent of SOLVESSO 150 (see chart). SOLVESSO 150 does not specifically teach the molecular weight of the solvent; however, it would be reasonable to expect that the solvent would meet this limitation because it possesses all of the other properties that the solvent of the present invention contains.

5. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO8700193.

WO teaches an additive for diesel fuel comprising iron naphthenate and a high boiling solvent(see abstract; page 2, lines 3-21). The solvent is a polyaromatic solvent such as anthracene oil. Anthracene oil has a boiling point of 330-400 C and a flash point of 180 degrees (see page 2, lines 22-26). The iron naphthenate is present in the additive in an amount of up to 90 liters and in the fuel in amount up to 0.05 kg/ton fuel (see page 3, lines 18-28; page 4, lines 3-19; Examples 1-3).

WO teaches the limitations of the claims other than the cloud point and the viscosity. However, it would be reasonable to expect that the composition of WO would meet these limitations because WO uses the additive of its invention in the same environment and for the same purpose as Applicant.

6. Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues that the declaration of Mr. Brennan shows that the presently claimed additive was difficult and not obvious to formulate. Applicant argues that the prior art fails to teach the claimed viscosity or cloud point.

Art Unit: 1714

The declaration has been considered but is not deemed persuasive. Applicant's showings are not commensurate in scope with the claims. Applicant's claims are devoid of proportions whereas the examples of the declaration use the additive in an amount of 23.6g FE/l of iron naphthenate plus solvent. Claim 1 provides no guidance as to how the claimed physical properties were obtained and it is the examiner's position that the prior art renders obvious the claimed additive composition.

Applicant argues that the solvent cited by the examiner teaches only the viscosity of the solvent itself and not of the additive composition. Since oilchem.com teaches that SHELLSOL AB and SOLVESSO 150 are art recognized equivalents, it would be reasonable to expect that the combination of SOLVESSO 150 and iron naphthenate would possess the claimed viscosity, absent evidence to the contrary.

Applicant argues that the declaration shows that solvents possessing the claimed flash point do not necessarily have to possess the claimed cloud point. Applicant sets forth Aromatic 150 as an example.


Applicant has not compared the present invention to the closest prior art. SOLVESSO 150 appears to meet all of the limitations with respect to the physical properties of the solvent set forth in the claims. Applicant has provided no data to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

Art Unit: 1714

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cepha D. Toomer
Primary Examiner
Art Unit 1714

10640986\20070205